(excerpt); speeches delivered at the IVth Mathematics Congress in Romania; speech at the opening of the Colloquium on partial differential equations.

(d) *Philosophical problems of mathematics*: Axiomatic thinking in modern mathematics; modern mathematics and reality; the part of mathematics in modern physics; the revolutionary character of Bolyai's and Lobachevskii's ideas; Lenin's theory of knowledge and arguments against mathematical idealism; interview granted the review *Philosophical Research*; dialectical materialism -- the only scientific research method in mathematics; conference at the Symposium on the "Leading part of the Communist Part in the orientation of Romanian scientific research"; interview granted on the book *Along the Paths of Science*.

(e) *Attitudes*: "On the opening of the Free Democratic University" (excerpt); "The aims of civilization," lecture at the festival of the Patriots' Union (excerpt); lecture at the "Progressive Youth" organization; lecture on Lenin at the Faculty of Mathematics and Physics (excerpt); etc.

(f) *S. Stoilow as seen by his contemporaries*: "Meeting S. Stoilow," by Alexandru Rosetti; "In memoriam," by Miron Nicolescu.

This collection of articles is agreeable to read, interesting, useful, sometimes even captivating when evoking portraits of mathematicians. Simion Stoilow's fine thinking spirit and action are truly and completely rendered, especially by the two portraits by his former friends in the final section.

MEN AND DISCOVERIES IN MATHEMATICS. By Bryan Morgan. London (John Murray), 1972. 235 p. Photos, figures. U.K. £2.

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To apply the standards of scholarly research to this popularization would be misguided. What then are the functions of a popularized history of mathematics? Surely its primary function is to entice readers who would avoid a more technical history and to motivate them to read further in the field. Hence a well chosen, annotated bibliography becomes essential. For the same reason the author should be familiar with the general literature, -- especially the standard, recent reference works. Knowledge of the specialist literature, while desirable, is not vital. Although the author ought to convey the crux of the topics explored, some errors of detail may be forgiven if the subject is vigorously sketched. But he should not lose sight of the need to tell a good story. Hence biography is often an appropriate vehicle. Finally, a popularization may be boldly speculative in a way often censured in specialist monographs. Between mathematics and

the broader culture, it might suggest interrelations which specialists could analyze in case studies.

Unfortunately, the ideal popularization depicted above bears faint resemblance to the book under review. Morgan states that his intended audience consists of high school and college students not majoring in science. However, he has provided them with no functioning bibliography, much less an annotated one, to explore after his book. Furthermore, his grasp of the general literature in the history of mathematics is weak at best, for he considers Cajori's *A History of Mathematics* as "the standard source in English" (p.xi) and Bell's *Men of Mathematics* as "probably the most scholarly" biographical work (p. xii)!

Although Morgan describes the major periods of mathematics, he misunderstands what mathematical concepts were available in each. Thus he credits the concept of a set to the Babylonians (p.198). Fortunately, the numerous factual errors do not detract too seriously from the larger history. However, Morgan tends to lose touch with any unifying themes, and the coherence of the narrative suffers. This difficulty is most pronounced in the nineteenth century -- admittedly a complex period -- where the author would have done well to treat fewer topics in more lucid detail. On the other hand, he does enliven his story with biographical sketches of certain mathematicians.

Finally, Morgan engages in some bold speculations, but does he realize how speculative they are? He gives the reader no indication how conjectural our knowledge of pre-Socratic Greek mathematics is. As for the Babylonians, "such men... saw at least the dim outlines of almost every idea which lies at the heart of mathematics today" (p.18). Surely this is precursoritis at its most fanciful. Later, too, he gives credit where little credit is due: "The eighteenth century was that in which our subject [mathematics] took up its present form" (p. 121). One might make such a claim for the nineteenth century, certainly not for the eighteenth.

A good popularization is just as difficult to write as a good specialist monograph. Commendably, Morgan has attempted to place mathematics within a broader scientific context and has included biographical sketches. Nevertheless, the book cannot be recommended. For it misleads the reader both by misrepresenting the mathematical concepts available in earlier periods and by ignoring the recent secondary literature accessible to the general public.